GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:968
ANSWERED ON:02.03.2016
Weather Pattern
Singh Shri Ravneet

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government is aware of the fact that the country is facing uncertainities in weather patterns from the last three years;

(b) if so, the details thereof;

(c) whether the Government has taken any steps to provide the information to individuals regarding changes in the weather; and

(d) if so, the details thereof and if not, the reasons therefor?

Answer

THE MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a) Yes Madam.
(b) Monsoon rainfall varies on different spatial and temporal scales. Extreme rainfall events that occur at some isolated places (viz. heavy rainfall over Uttrakhand,2013; Jammu & Kashmir,2014;Tamilnadu and Andhra Pradesh in 2015) are highly localized and are largely part of the natural variability of the Indian monsoon system itself. Although, some recent studies suggest an increasing frequency and intensity of extremes in rainfall during the past 40-50 years, their attribution to global warming is yet to be established. Moreover, the report of the Inter- governmental Panel on Climate Change (IPCC) and our country"s own assessment using regional climate models indicate that the extreme rainfall events are likely to be more frequent in the later part of the 21st century in the world including India. Although, the monsoon rainfall at all India level does not show any trend, areas of increasing and decreasing trends at regional level are discerned.
(c)-(d)ESSO-IMD is providing specific nowcasting weather service across the country. This service activity currently covers 156 urban centres under which nowcast of severe weather (Thunderstorms; heavy rainfall from lows/depressions over the land) in 3-6h range is issued. The weather information (Maximum, Minimum temperatures, Rainfall and Sky condition, etc.) and forecast for next 7 days for 310 important cities and towns in all the states and union territories of India issued by the ESSO-IMD and are made available on the National and Regional websites of ESSO-IMD. ESSO-IMD, in coordination with State Governments, is generating forecasts for major pilgrimages such as Amarnath Yatra, Mansarovar Yatra, Chardham Yatra, Kumbhmela,etc. and also various mountaineering expeditions launched by the Armed Forces for Mount Everest and several other Himalayan mountains.

The Gramin Krishi Mausam Seva (GKMS) of ESSO-IMD has been successful in providing the crop specific advisories to the farmers at the district level twice weekly through different print/visual/Radio/ IT based wider dissemination media including short message service (SMS) and Integrated Voice Response System (IVRS). Agrometeorological Advisories are sent to 1.50 million farmers currently across the country through SMS that contains abrupt changes if any, in weather and its impact on crops.

ESSO-IMD also provides Quantitative Precipitation Forecast (QPF) up to 72 h at sub-basin scale through Flood Meteorological Offices (FMOs). FMOs provide meteorological support to the Central Water Commission (CWC) for issuing flood warnings in respect of the 43 rivers of India covering 137 sub-basins. CWC issues flood forecasts 6 h to 30 h in advance for 176 stations using QPF received from FMOs of ESSO-IMD and in-situ hydro-meteorological data.